ALD FOR INDUSTRY

EFDS Beneq ASM

Sponsored by

Conference & Exhibition | March 17 - 18, 2026 | Eindhoven, Netherlands

ALD for Industry 2026

The 9th International Conference ALD FOR INDUSTRY will again bridge the gap between fundamental science, industrialization and commercialization of this technology. Atomic layer deposition (ALD) is a process for depositing a variety of thin film materials from the vapor phase of matter. The growth of this technology is not only based in microelectronics applications, but also in areas of industrial Li-Ion batteries, photovoltaics, optics, light, biomedicine and quantum technology.

This event is already established since 2017 and attracts annually more than 100 participants and numerous exhibitors to visit Dresden. The Conference with Tutorial provides the opportunity to learn more about fundamentals of ALD technology, to get informed about recent progress in the field and to get in contact with industrial and academic partners. Increase your visibility and present your company in our accompanying exhibition.

This time, the Conference will take place in Eindhoven, Netherlands. We thank our cooperation partners and look forward to a interactive and inspiring event in international atmosphere.

Many thanks to the Program Committee and all authors for the preparation of the recent interesting program.

PROGRAM COMMITTEE

- Sean Barry, Carleton University, Canada
- Gloria Gottardi, Fondazione Bruno Kessler, Italy
- Christoph Hossbach, Applied Materials, Germany
- Martin Knaut, TU Dresden, Germany
- Harm Knoops, University Eindhoven & Oxford Instruments Plasma Technology, Netherlands
- Lie Luo, Beneq Oy, Finland
- Laura Nyns, IMEC, Belgium
- Fred Roozeboom, University Twente, Netherlands
- Dmitry Suyatin, AlixLabs, Sweden

ORGANIZER

European Society of Thin Films
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Phone: +49 351 8718370 | info@efds.org |
Website: www.efds.org

Media Partner

ALPIN
Atomic Layer Process Innovation Network

ALD4EMO

High Tech NL
Share innovation. Shape tomorrow.

Experience the Eindhoven ALD Community - Company and Lab Tours

The Eindhoven University of Technology (TU/e) and SparkNano invite you to a **welcome event** at Eindhoven.

When? March 16, 2026 | Monday | 16:00 – 20:30

Where? Meet at TU/e at 16:00 and 18:00
Flux building (entrance) at TU/e campus,
De Groene Loper 19, Eindhoven

Schedule of Company Tours

16:00 Welcome at TU/e
16:15 Board shuttle to SparkNano & company tour (snacks and drinks)
18:00 Board shuttle back to TU/e & Tour of NanoLab cleanroom & ALD labs
19:00 Get together with drinks and food (soda, beer and pizza)
20:00 Expected end of the welcome event

SPARKNANO TU/e EINDHOVEN UNIVERSITY OF TECHNOLOGY

This event is organized and sponsored by TU Eindhoven and SparkNano. Thank you very much!

Company Tour at SparkNano

SparkNano invites you to see innovative technology developments at industrial scale. Receive an exclusive factory tour hosted by industrial spatial ALD expert, Dr. Paul Poodt.

Tour of NanoLab cleanroom and ALD labs (Kessels & co-workers)

10+ ALD reactors incl. PEALD and spatial ALD

Program

Subject to change without notice

Tuesday, March 17, 2026

08:00 | Registration & Exhibition Construction

10:00 | Opening

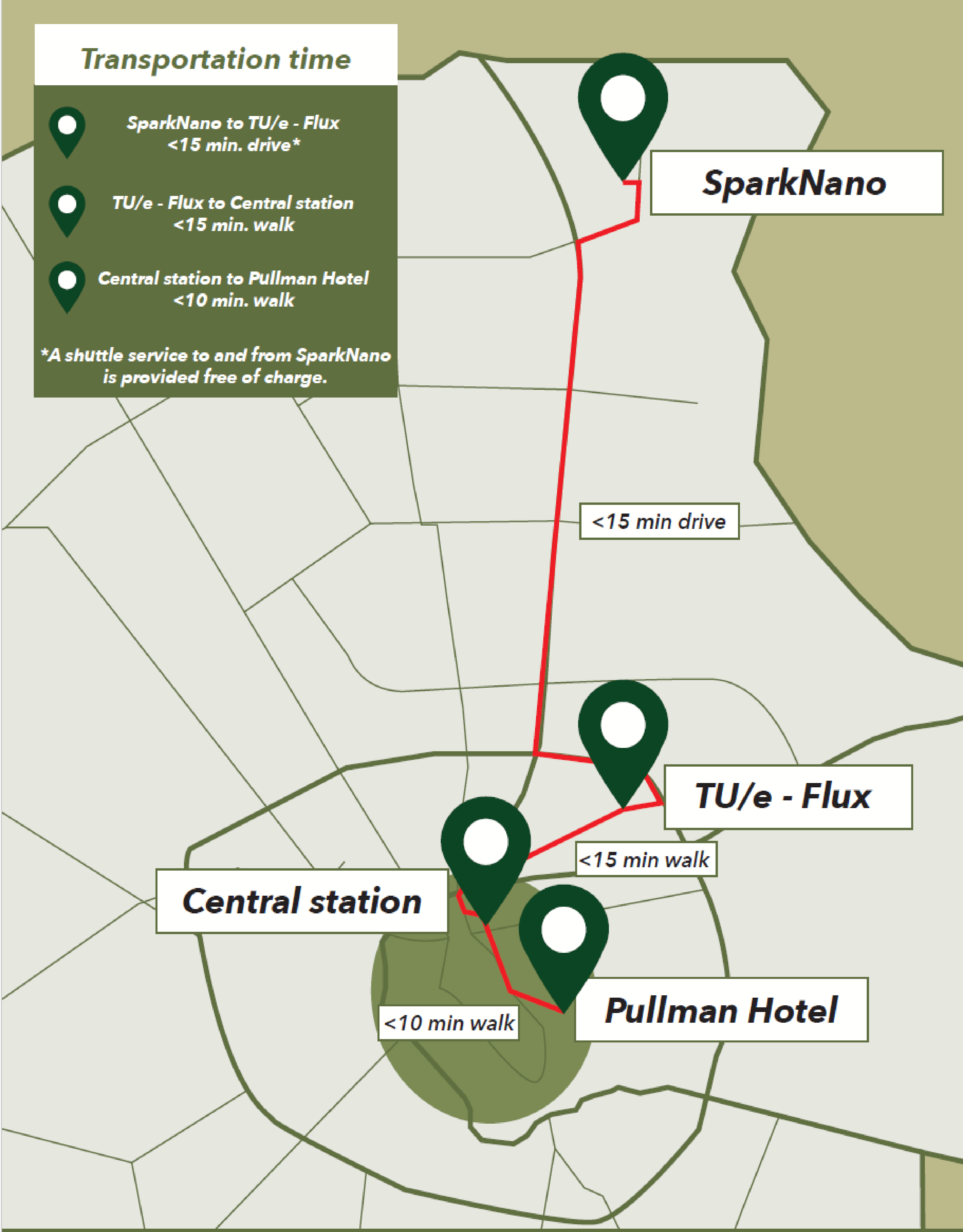
TUTORIALS

10:15 | Tut01
Atomic Scale Processing: from Understanding to Innovation
Erwin Kessels, Eindhoven University of Technology, Netherlands

10:45 | Tut02
Characterization and control of stress in ALD films for industrial applications
Martin Knaut, Technical University Dresden, Germany

11:15 | Tut03
ALD on particles, applications for catalysis and energy
Ruud van Ommen, Delft University of Technology, Netherlands

11:45 | Lunch Break



Transportation time

SparkNano to TU/e - Flux
<15 min. drive*

TU/e - Flux to Central station
<15 min. walk

Central station to Pullman Hotel
<10 min. walk

*A shuttle service to and from SparkNano is provided free of charge.

Eindhoven

Program

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Tuesday, March 17, 2026

SESSION 1 | Semiconductor Equipment

13:00 | KN0100
Artificial Intelligence drives semiconductor innovation
Paul de Bot, TSMC Europe B. V., Netherlands

13:30 | OR0101
Semiconductor Equipment Part Coating Opportunities with Atomic Layer Deposition (ALD)
Alexander Perros, Beneq Oy, Finnland

13:50 | OR0102
First-of-a-kind equipment for thin-film processing: from feasibility and design to volume manufacturing
Sorin G. Stan, VDL ETG Projects, Netherlands

14:10 | OR0103
Enabling Industrial ALD – Precision in Precursor Supply
Ehsan Mohseni, Sempa Systems GmbH

14:30 | OR0104
Past and Future of ALD in Electronics
Charles Dezelah, ASM, Finland

14:50 | Technical Talk
ForgeNano, USA

15:00 | Coffee Break

15:30 | NETWORK PRESENTATIONS
HighTechNL | Peter-Jan Hendrix, Eindhoven
ALD4EMO | Katrin Ferse, EFDS
ALPIN | Martin Knaut, TU Dresden, Germany

SESSION 2 | Optics and Photonics

16:10 | OR0201
High-Throughput Rotary Spatial ALD for Photonics and Semi Applications
Stephan Mingels, Bühler Alzenau GmbH

16:30 | OR0202
Spatial ALD for Large-area Optoelectronics: from Photovoltaics to Advanced Displays
Rong Chen, Huazhong University of Science and Technology, China

16:50 | OR0203
Batch Plasma Enhanced Atomic Layer Deposition for High Power Laser Applications
Adriana Szeghalmi, Fraunhofer-Institut für Angewandte Optik und Feinmechanik IOF, Germany

17:10 | TREND REPORT
Past, Present, and Future of ALD in Semiconductor Manufacturing
John West, YOLE Group, France

17:30 Break

17:30 – 18:30 Poster Session

19:00 | Dinner
@ Pullman Eindhoven Cocagne
directly at Event location
Room Wintertuin
****In Registration Ticket included.*

Program

Subject to change without notice

Wednesday, March 18, 2026

09:00 Opening

SESSION 3 | Future Applications - part 1

09:10 | KN0300
GaN Power Devices on 300mm Substrates
Stefaan Decoutere, IMEC, Belgium

09:40 | OR0301
Atomic layer processing for power electronics
Johannes Heitmann, TU Bergakademie Freiberg, Germany

10:00 | OR0302
Modelling the Thermal Properties of Benzimidazolium Bicarbonate Salts
Eden Goodwin, Carleton University, Canada

10:20 | OR0303
Making ALD sustainable
Job Soethoudt, IMEC, Belgium

10:40 Coffee Break

SESSION 4 | Future Applications - part 2

11:10 | OR0401
Implementing atomic layer deposition with adjacent technologies for advanced device fabrication
Eric W. Deguns, Ganesh Sundaram, Veeco ALD, USA

11:30 | OR0402
Roll-to-roll Spatial ALD for Li-ion batteries
Paul Poodt, SparkNano, Netherlands

11:50 | OR0403
Powder Atomic Layer Deposition at Manufacturing-Scale for Energy Applications and Additive Manufacturing
Matt Weimer, ForgeNano, USA

12:10 | OR0404
Fast remote plasma ALD and its applications
Harm Knoops, Oxford Instruments Plasma Technology, Netherlands

12:30 | Lunch Break

SESSION 5 | Materials and Monitoring

13:30 | OR0501
Ferroelectric Aluminum-Scandium Nitride by Plasma-Enhanced Atomic Layer Deposition under Ultrahigh Purity Conditions
Bruce Rayner, Kurt J. Lesker Company, United Kingdom

13:50 | OR0502
Electronic and thermoelectric properties of thermal and plasma-enhanced ALD titanium nitride
Christoffer Kauppinen, VTT Technical Research Centre of Finland Ltd., Finland

14:10 | Technical Talks
Pegasus Chemicals, United Kingdom
Dockweiler Chemicals, Germany

14:30 | Coffee Break

15:00 | OR0503
Large Area Transition Metal Dichalcogenides by Atomic Layer Deposition
Nils Boysen, Fraunhofer-Institut für Mikroelektronische Schaltungen und Systeme IMS, Germany

15:20 | OR0504
Simulation of Hafnium Silicate ALD: Reaction Mechanisms and Film Growth Modelling
Andreas Zienert, Fraunhofer-Institut für Elektronische Nanosysteme ENAS, Germany

15:40 | OR0505
Reaction characterization and real-time anomaly detection using in situ full-range quadrupole mass spectrometry during ALD
Andreas Werbrouck, Ghent University, Belgium

16:00 End of the Conference

Exhibition

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Exhibition

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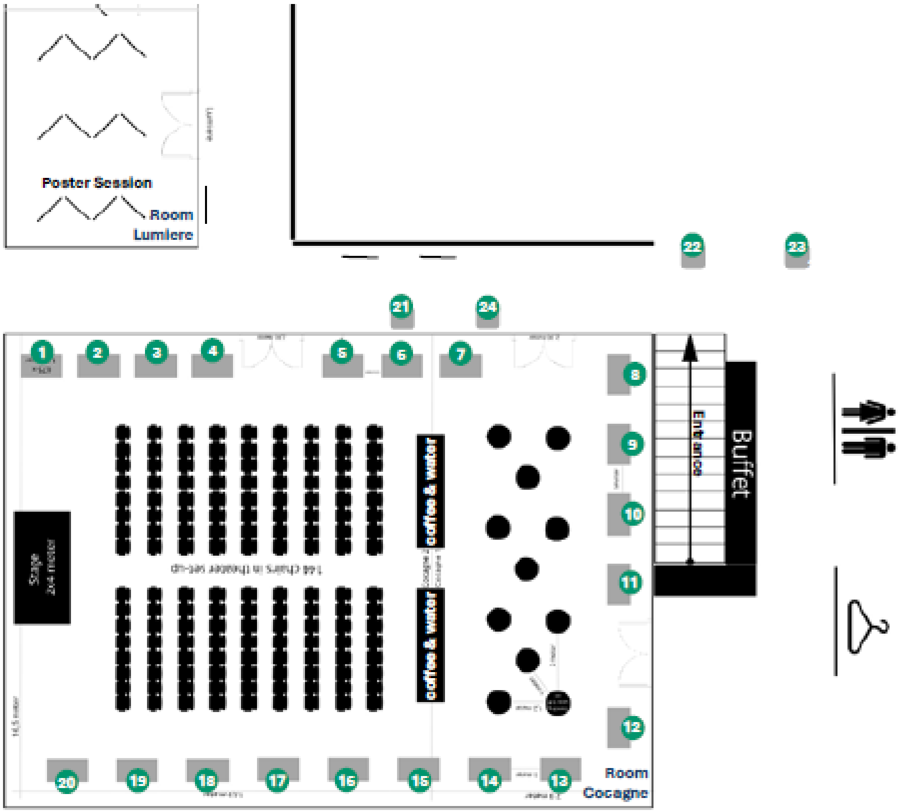

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Poster Session

There is a lot of research and development activities around Atomic Layer Deposition and Atomic Layer Etching. You did not receive a talk? Use the chance and present a poster. This is a nice way to get in discussion with other colleagues.

A Poster Session will take place on Tuesday, March 17, 2026, at 17:30 in the afternoon. Posters will be visible over the whole event.

PO001 | *Surface Chemistry Model for Atomic Layer Deposition of Hafnium Silicate: Reaction Mechanisms and Process Simulation* | Xiao Hu, Fraunhofer ENAS, Germany

PO002 | *ALD Activities at Fraunhofer IMS: Tools, Materials and Applications* | Noah Brechmann, Fraunhofer IMS, Germany

PO003 | Pre-Deposition Approaches for Advanced Electrical and Structural Evaluation of HAR Test Structures | Jussi Kinnunen, Chipmetrics, Germany

PO004 | *Spatial Atomic Layer Deposition: A Key Enabling Technology for Flexible Electronic Device Encapsulation* | Hindrik de Vries, SALD B. V., The Netherlands

PO005 | *ALD activities at the Leibniz Institute for Solid State and Materials Research Dresden* | Sebastian Lehmann, Leibniz IFW, Germany

PO005 | *A Compact SAW-Based Aerosol Generator Enabling Precise Liquid Precursor Delivery for Next-Generation ALD Systems* | Mehrzad Roudini, SONOJET, Germany

PO006 | *ALD desposited WO_x films; towards Neuromorphic Computing Devices* | Ahmed O. Abdelaal, University of Oslo, Norway

PO007 | *Sustainability-Driven Silicon Precursors for ALD* | Anish Philip, Aalto University, Finland

PO008 | *High-Resolution Plasma Printing: Towards an ALD-Enabling Tool for Patterned Low-Temperature Films* | Laura Barillas-Mora, Leibniz Institute for Plasma Science and Technology (INP) / MicroQuasar Technologies, Germany

PO009 | *ALD Engineered Functional Materials for Next Generation Energy Technologies* | Matteo Bordin, Fondazione Bruno Kessler - HyRES unit, Italy

PO010 | *Wafer scale fabrication of graphene field effect transistors using different encapsulation layers deposited by thermal and plasma enhanced ALD* | Bárbara Canto, AMO GmbH

PO011 | *Plasma enhanced atomic layer deposition (PEALD) using scia Atol 200* | Marcus Daniel, scia Systems GmbH, Germany

PO012 | *Optimizing ALD TiO_2 Films for NO Degradation* | Tobias Graumann, Fraunhofer IST, Germany

PO013 | *Application of (PE)ALD grown thin films of metal oxides for photocatalytic water purification* | Daria Jardas Babić, University of Rijeka, Croatia

PO014 | *Microstructural Evolution of $SnO2_2$ Thin Films Deposited by ALD and PEALD* | Mattea Mačkić Jovanović, University of Rijeka, Croatia

Poster Session

PO015 | *Super-cycle processing of AlGaN by plasma-enhanced atomic layer deposition* | Bodo Kalkofen, SENTECH Instruments GmbH, Germany

PO016 | *ALD and ALE for quantum technologies: Merits, tailored processing, and device integration* | Guillaume Krieger, Eindhoven University of Technology, The Netherlands

PO017 | *Case Study on Oxygen Diffusion in Aluminum Nitride* | Karsten Lamann, Tascon GmbH, Germany

PO018 | *Mechanical properties of ultra-thin hydroxylated ALD alumina probed by spherical nanoindentation and surface acoustic waves* | Krzysztof Mackosz, Empa - Swiss Federal Laboratories for Materials Science and Technology, Switzerland

PO019 | *ALD for interface engineering in batteries* | Meike Pieters, Eindhoven University of Technology, The Netherlands

PO020 | *The AtomicLimits ALD/ALE Database: Towards an AI Research Assistant for the ALD/ALE Community* | Eleni Poupaki, Eindhoven University of Technology, The Netherlands

PO021 | *From Baseline Studies to Application: ALD-Derived Grass-Like Alumina for Broadband Anti-Reflection Coatings* | Fabian Steger, RhySearch, Switzerland

PO022 | *ALD W-VO_2 based thermal management for spacecrafts* | Kai Sun, University of Southampton, United Kingdom

PO023 | *Structural, optical, and electrical properties of atomic layer deposited Sn-doped ZnO* | Iqtidar Wasif, FHR Anlagenbau GmbH, Germany

PO024 | *Where Atomic Layer Deposition can add value in (H_2O) electrolysers* | Hanmiao Wu, Eindhoven University of Technology, The Netherlands

PO025 | *Atomic Layer Deposition for Energy Technology, Medical Technology and Optics* | Katrin Ferse, EFDS e. V., Germany

PO026 | T.B.A. | Vivek Beladiya, PLASMA ELECTRONIC GmbH, Germany

PO027 | T.B.A. | Soumyajyoti Dey, Aether Semiconductors, India

Registration

Link to Registration

Conference Tickets	Price*
Standard ticket | early bird	830 EUR
Standard ticket | after January 31, 2026	930 EUR
Student ticket / Student Poster	420 EUR
Poster Presenters	730 EUR

The registration fee includes the participation of the chosen event, conference booklet, coffee and lunch breaks as well as the Get-Together.
*Workshop fees are free of VAT according to §4 (22a) UStG (German value-added tax law)

Exhibition & Sponsoring	Gold Sponsor	Platinum Sponsor
Logo @ event website	X	X
Logo @ front page of printed program booklet		X
Advertisement in the printed program booklet	Half page	Full page
1 presentation spot at the event (table + place for one roll-up)	X	X
1 person free of charge	X	X
A presentation slot (10 min advertisement or 20 min expert presentation)		X
	2.200 EUR**	2.700 EUR**

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The general terms and conditions of sale of EFDS apply (www.efds.org/en/agb).
Cancellations must be made in written form.

Travelling

Event Location

PULLMAN EINDHOVEN COCAGNE
VESTDIJK 47
5611 CA EINDHOVEN – THE NETHERLANDS
T. +31 40 232 6195 -- F. +31 40 232 6155
reservations.pullmaneindhoven@accor.com
www.pullman-eindhoven-cocagne.com

Hotel Recommendations

Pullman Eindhoven Cocagne (Venue) |
Vestdijk 47 | 5611 CA Eindhoven | The Netherlands

Superior rooms from €199,00 per room per night, including breakfast and excluding city tax (€5,25 per person, per night), for one guest.

Please book via the following booking link:
https://book.passkey.com/e/51154965

Further Hotels

Hotel Mariënhage | Kanaalstraat | 45611 CT Eindhoven (NL) | Phone: +31 40 311 14 44 | Mail: info@marienhage.com

Park Plaza Eindhoven | Geldropseweg 17, 5611 SC Eindhoven (NL) | Phone: +31 40 214 6500, Mail: ppeinfo@pphe.com

Sandton Eindhoven Centre | Stratumsedijk 23D, 5611 NA Eindhoven (NL) | Phone: +31 40 212 13 30, Mail: receptie.eindhoven@sheetz.nl